South Carolina Department of Labor, Licensing and Regulation Division of Labor Office of Occupational Safety and Health Columbia, South Carolina 29211

OSH Program Directive Number 76-1910.212/219-6/4

Subject: Application of Article VI, Section 1910.212 (a) (1), Ingoing Nip

Points, Section 1910.219 (a) (1), General Requirements, and Section 1910.219 (e) (3), Vertical and Inclined Belts to Light and

Medium Duty Sewing Machines in the Light Apparel

Manufacturing Industries.

Standard: Article VI, Section 1910.212 (a) (1), Section 1910.219 (a) (1), and

Section 1910.219 (e) (3), Rules and Regulations, Commissioner of

Labor, State of South Carolina.

Cross Reference to

Federal Standards: 29 CFR 1910.212 (a) (1), 29 CFR Section 1910.219 (a) (1), and 29

CFR Section 1910.219 (e) (3).

Background:

- a. This program directive provides a uniform means of evaluating the nip point and moving belt hazard on light and medium duty sewing machines such as those used in apparel manufacturing and sewing of light weight materials.
- b. Federal OSHA has received letters and requests for a variance from the subject standards for guarding belts and hand wheels above the sewing machine table tops. Most owners and users agree that drive wheels and belts beneath the tables should be fully enclosed, but enclosure of the belt and hand wheels above the tables is unnecessary and would interfere with sewing operations. Since the operator usually uses both hands to feed and guide the material while the belt and hand wheel are in motion, a safe distance is maintained from the nip point. The operator's hands should be near the wheel nip point to raise or lower the needle, only when the motor is disengaged. Reports indicate the accidents and injuries resulting from exposure to belts and hand wheels are very low.
- c. Article VI, Section 1910.219 (a) excludes the following belts, except when they are operating at more than two hundred and fifty (250) feet per minute:
 - (1) Flat belts one (1) inch wide or less;

- (2) Flat belts two (2) inches wides or less, which are free from metal lacing or fasteners;
- (3) Round belts one-half (1/2) inch or less in diameter; and
- (4) Single strand V-belts, thirteen thirty-seconds (13/32) inch wide or less
- d. This directive applies only to flat and round belts without metal fasteners or lacings since the consensus is that V-belts or belts with metal fasteners or lacings are hazardous.
- e. Sewing machines used to sew materials such as heavy canvas, denim, leather, vinyl or other heavy material are not covered by this directive.

Interpretation:

- a. When sewing machines with unguarded hand wheels and belts located above the table tops are encountered, the following guide is provided to determine if a hazard exists:
 - (1) When the belt and wheel are in motion, hands are not placed in the wheel, nip point or belt area.
 - (2) Distance between the point where the operator is holding the material with both hands and the belt area is sufficient to prevent any part of the operator's body from being exposed to danger.
 - (3) The table top is arranged or of such size to prevent any other employee, passing by or working adjacent to the wheel or belt, from being exposed.
 - (4) There is no past history of injuries.
- b. If the preceding conditions are met, the exposure is considered minimal and a de minimis notice is issued.

Effective Date:

This instruction is effective upon receipt and will remain in effect until cancelled or superseded by amendment to the Regulation or Program Directive.

William M. Lybrand, Director October 29, 1976